

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A soldering workpiece, comprising:
 a soldering workpiece made from aluminum and/or aluminum compounds, and having
 an oxide and/or hydroxide layer arranged at a surface of the soldering workpiece,
 wherein a ~~[[the]]~~ thickness d of the oxide and/or hydroxide layer is greater than 25
nm, the thickness of a native oxide and/or hydroxide layer
 wherein the soldering workpiece is configured to be soldered so that solder is directly
applied to the oxide and/or hydroxide layer.
2. (Currently Amended) The soldering workpiece as claimed in claim 1, wherein $25\text{ nm} < d$
 $< 1000\text{ nm}$, ~~in particular $50\text{ nm} < d < 500\text{ nm}$, in particular $80\text{ nm} < d < 250\text{ nm}$.~~
3. (Currently Amended) The soldering workpiece as claimed in claim 1, wherein the oxide
and/or hydroxide layer includes hydroxide and comprises ~~consists~~ predominantly of
boehmite.
4. (Currently Amended) The soldering workpiece as claimed in claim 1, wherein the oxide
and/or hydroxide layer includes inhomogeneities, ~~in particular notches, pores and/or cracks.~~
5. (Currently Amended) The soldering workpiece as claimed in claim 4 ~~[[1]]~~, wherein the
homogeneities are introduced into the oxide and/or hydroxide layer by chemical and/or
thermal and/or mechanical treatment of the soldering workpiece.
6. (Currently Amended) The soldering workpiece as claimed in claim 1, ~~wherein the~~
~~soldering workpiece is provided with an in particular~~ further comprising a halogen-containing
lubricant.
7. (Currently Amended) The soldering workpiece as claimed in claim 6 ~~[[1]]~~, wherein the
lubricant includes additives or constituents comprising ~~such as~~ carboxylic acids, amines,
sulfur compounds and/or phosphorus compounds.

8. (Currently Amended) The soldering workpiece as claimed in claim 1, ~~wherein the soldering workpiece has~~ further comprising a solder layer comprising an aluminum compound.

9. (Currently Amended) The soldering workpiece as claimed in claim 1, wherein a base material of the soldering workpiece has a magnesium content of greater than 0.2%, ~~in particular greater than 0.5%, preferably less than 2%.~~

10. (Currently Amended) A soldering process for joining at least two workpieces to one another, comprising: wherein
joining at least two workpieces, wherein at least one workpiece is a workpiece as described in claim 1 ~~is used~~.

11. (Currently Amended) A soldering process, in particular the soldering process as claimed in claim 10, further comprising at least one ~~with prior~~ machining process that is ~~processes~~ being carried out on at least one workpiece prior to the joining step, ~~in particular deep-drawing, cutting and/or punching~~, wherein ~~a~~ an ~~in particular~~ halogen-containing lubricant is applied to the workpiece during the ~~[[prior]]~~ machining processes.

12. (Currently Amended) The soldering process as claimed in claim 11 ~~[[1]]~~, wherein the lubricant includes additives or constituents comprising ~~such as~~ carboxylic acids, amines, sulfur compounds and/or phosphorus compounds.

13. (Currently Amended) The soldering process as claimed in claim 10 ~~[[1]]~~, wherein thermal degreasing and the joining ~~soldering~~ operation are carried out together, ~~in particular~~ during a single heating operation.

14. (Currently Amended) The soldering process as claimed in claim 1, wherein a shielding gas, ~~in particular hydrogen, argon or nitrogen~~, is used for heating and/or soldering during the joining step.

15. (Currently Amended) A heat exchanger, ~~in particular for a motor vehicle~~, comprising a ~~wherein the~~ heat exchanger that is at least partially soldered using the process as claimed in claim 10 ~~[[1]]~~.

16. (New) The soldering workpiece as claimed in claim 2, wherein $50 \text{ nm} < d < 500 \text{ nm}$.
17. (New) The soldering workpiece as claimed in claim 16, wherein $80 \text{ nm} < d < 250 \text{ nm}$.
18. (New) The soldering workpiece as claimed in claim 4, wherein the inhomogeneities comprise notches, pores and/or cracks.
19. (New) The soldering workpiece as claimed in claim 9, wherein the magnesium content is greater than 0.2% and less than 2%.
20. (New) The soldering process as claimed in claim 11, wherein the at least one machining process comprises a deep-drawing, cutting and/or punching process.
21. (New) The soldering process as claimed in claim 10, wherein the shielding gas comprises hydrogen, argon or nitrogen.
22. (New) A soldering process for joining at least two workpieces to one another, comprising:
 - providing a soldering workpiece made from aluminum and/or aluminum compounds, growing an oxide and/or hydroxide layer arranged at a surface of the soldering workpiece to a thickness sufficient to provide contact between a soldering compound and the soldering workpiece underneath the oxide and/or hydroxide layer during a subsequent soldering process,
 - introducing inhomogeneities into the oxide and/or hydroxide layer, and
 - soldering the soldering workpiece to another workpiece.
23. (New) The soldering process as claimed in claim 22, wherein the thickness of the oxide and/or hydroxide layer is greater than 25 nm.
24. (New) The soldering process as claimed in claim 22, wherein the oxide and/or hydroxide layer separates into fragments that detach from the soldering workpiece during the soldering step.
25. (New) The soldering process as claimed in claim 22, wherein the inhomogeneities are introduced by a halogen-containing lubricant.

26. (New) A soldering workpiece, comprising:

a soldering workpiece made from aluminum and/or aluminum compounds, and
an oxide and/or hydroxide layer grown at a surface of the soldering workpiece to a
thickness sufficient to provide contact between a soldering compound and the soldering
workpiece underneath the oxide and/or hydroxide layer during a subsequent soldering
process,

wherein the oxide and/or hydroxide layer includes inhomogeneities introduced into the
oxide and/or hydroxide layer.